Announcement of a Special Issue of *Advances in Space Research* on

Progress in Cosmic Ray Astrophysics

Papers are invited for a special topical issue of *Advances in Space Research* (ASR) entitled **"Progress in Cosmic Ray Astrophysics".**

This special issue is open to all scientific papers related to the origin, acceleration and propagation of cosmic rays. The last decade has been extremely rich on breakthroughs and discoveries in astrophysics of cosmic rays and related areas that stimulated exciting discussions in the community. There has been significant progress in both measurements of cosmic rays and in models describing their acceleration and propagation through the Galaxy, yet the exact origin of these ubiquitous particles remains elusive. Recent progress in understanding of cosmic rays through new data and theoretical models, along with prospects for future measurements will be the focus of this special issue. Gamma-ray observations from space and by ground-based Cherenkov telescopes that provide complementary information about the sources and distribution of cosmic rays in the Milky Way, and papers on new experimental approaches and theoretical analyses directed towards the origins of the cosmic messengers, including astrophysical neutrinos, are also encouraged. Individuals and collaborations working in the field of cosmic rays and related fields are encouraged to submit a manuscript for this special issue. Individuals who attended the COSPAR 2022 meeting in Athens are especially encouraged to submit a manuscript for this special issue.

The following topics are appropriate for this issue:
Cosmic Rays
Isotopic and elemental composition
Cosmic ray spectra
Gamma rays
Photon emissions at all wavelengths
Neutrino emission
Gravitational waves and their electromagnetic counterparts
Experimental measurements
Theoretical models and interpretations
Sources of cosmic rays
Acceleration of particles in astrophysical sources
Propagation of cosmic rays in Galactic and extragalactic space
Properties of interstellar and intergalactic medium
New physics relevant to astrophysics of cosmic rays in broad sense

Papers must be submitted electronically to https://www.editorialmanager.com/AISR. To ensure that all manuscripts are correctly identified for inclusion into the special issue, authors must select **"Special Issue: Cosmic Rays"** when they reach the "Article Type" step in the submission process. Submitted papers must be written in English and should include full affiliation postal addresses for all authors. The general format for submission of papers can be found on the *ASR* Elsevier web site at

http://www.journals.elsevier.com/advances-in-space-research/

Only full-length papers will be considered for publication, subject to peer review by a minimum of two reviewers. There are no page limits although the length of the paper should be appropriate for the material being presented. While the deadline for submissions is **31 October 2023**, papers will be published electronically as soon as they are accepted. The printed issue will be assembled within a reasonable time with late papers being printed in regular issues of ASR. All articles will be typeset at no cost to the author; there is a charge for printing color figures; there is no charge for color figures on the electronic version.

Dr. Igor V. Moskalenko and **Dr. Eun-Suk Seo** are the Guest Editors for this Special Issue. Questions can be directed to Dr. Moskalenko (mailto:imos@stanford.edu) and Dr. Seo (mailto:seo@umd.edu) or to the Co-Editor for Special Issues, Dr. Peggy Ann Shea (sssrc@msn.com).